

FIG. 1

REFERENCE
FRAME #2

48

REFERENCE
FRAME #1

42

CURRENT
FRAME

40

MV2

MV1

49

FIG. 2

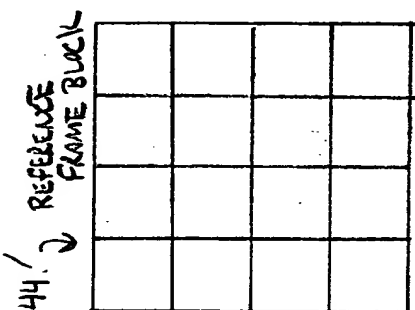
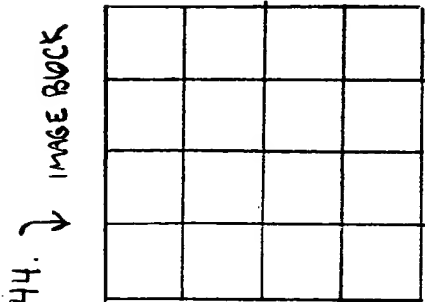
44'

44'

46'

44

46



=

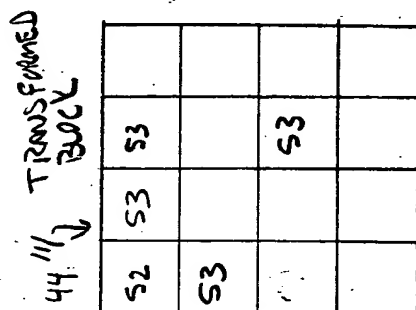
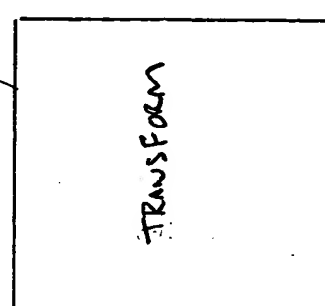
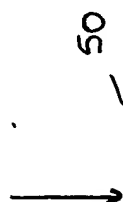
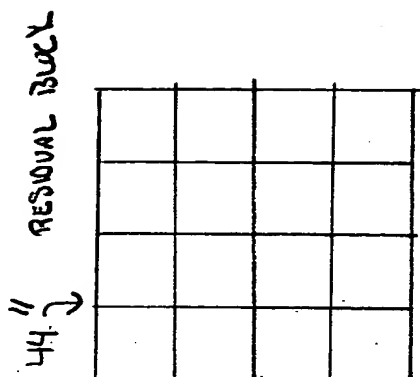


FIG. 3

44"

S2	S3				
S3	S3				

S2	S3				
S3	S3				

46"

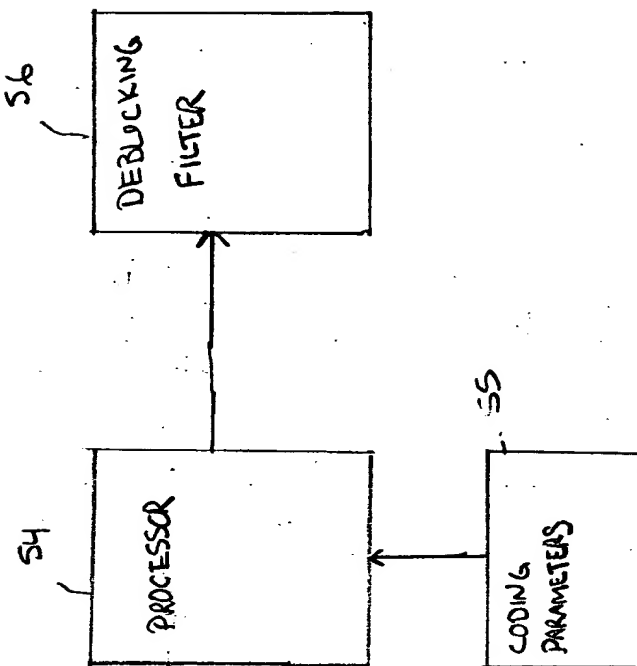


FIG. 4

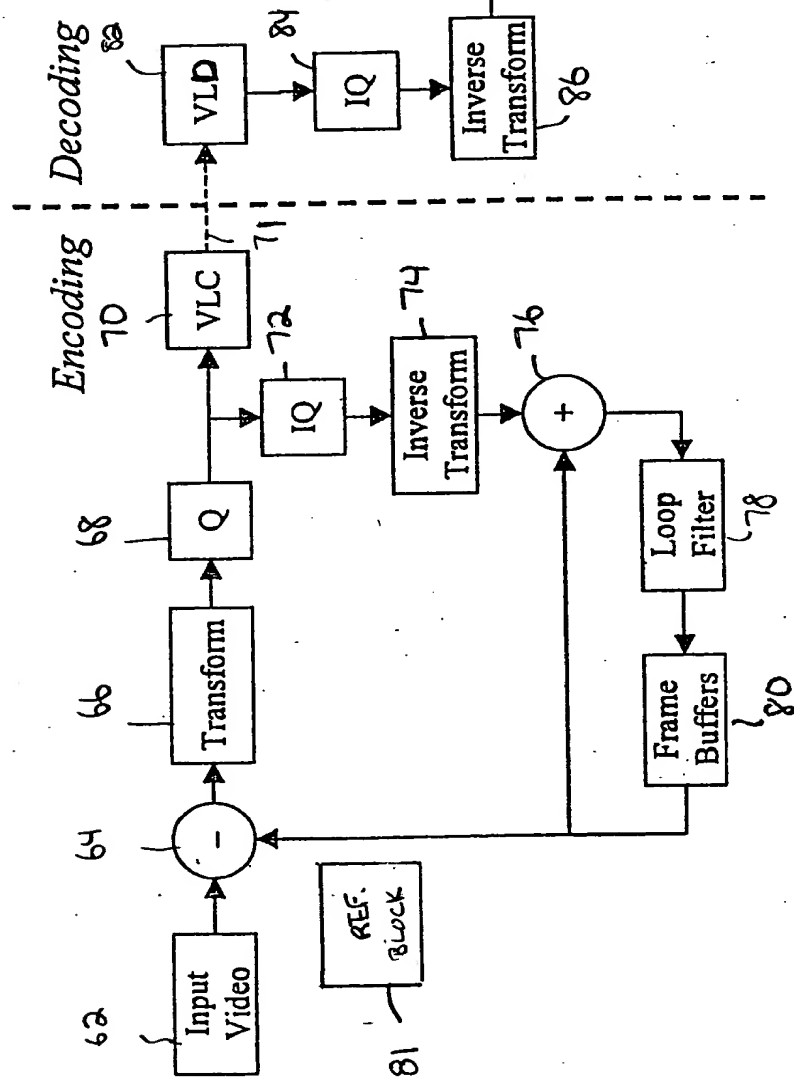


FIG. 5

78,90,94

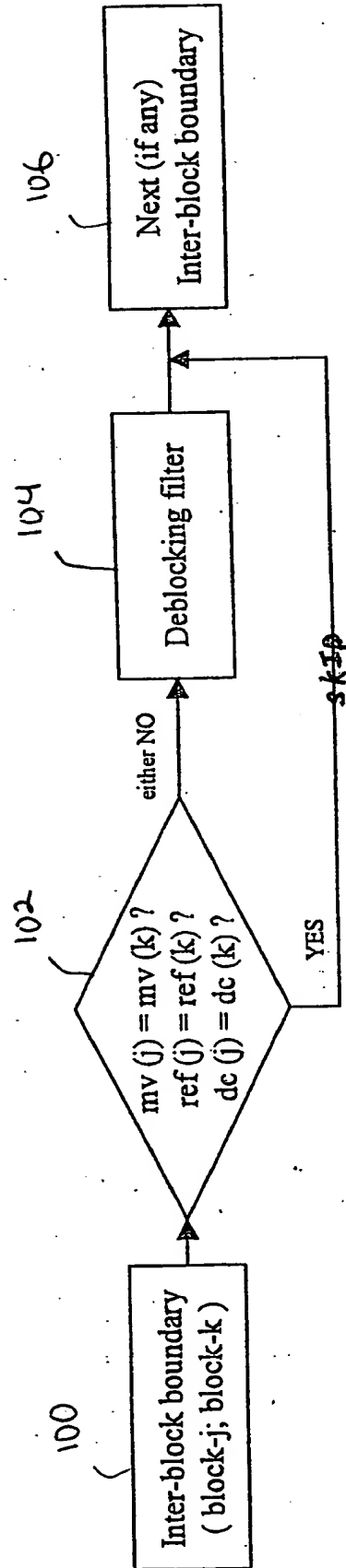


FIG. 6

110

Table 1. Comparison between TML and the proposed loop filtering scheme

Video sequence	QP	Bitrate (bps)		PSNR(Y)		PSNR(U)		PSNR(V)		New loop filter relative time saving
		TML	SLA	TML	SLA	TML	SLA	TML	SLA	
Akiyo_cif 300 frames @ 30fps	25	33151	32346	34.050	34.161	38.934	39.042	40.300	40.369	63.0%
	30	22775	22295	30.797	30.920	36.610	36.964	38.680	38.771	68.2%
Foreman_cif 300 frames @ 30fps	25	165115	162740	30.835	31.006	38.124	38.174	38.966	39.030	43.1%
	30	101357	100215	27.580	27.836	36.745	36.811	37.267	37.362	42.1%
Foreman_qcif 100 frames @ 10fps	25	28681	28677	29.822	29.931	37.586	37.631	37.773	37.938	38.4%
	30	15999	15822	26.250	26.435	36.432	36.323	36.222	36.283	41.3%
Tempete_cif 260 frames @ 30fps	25	336200	329115	28.277	28.490	33.982	34.143	36.009	36.184	45.3%
	30	168133	159789	24.583	24.927	32.334	32.628	34.512	34.799	50.6%

FIG. 7